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ABBREVIATIONS

DOT	Department of Transportation
FHWA	Federal Highway Administration
GAO	General Accounting Office
NHTSA	National Highway Traffic Safety Administration

Item 546-D GAO/CED-81-16

BY THE COMPTROLLER GENERAL

Report To The Congress

OF THE UNITED STATES

COMPLETED ORIGINAL

Highway Safety Grant Program Achieves Limited Success

Traffic accidents kill more than 50,000 people each year. Since 1966 the Department of Transportation has administered a program that has provided nearly $1.3 billion in Federal grants to State and local governments to help reduce these accidents and related losses.

GAO assessed the Department's program and concluded that

--it needs direction from the Congress,

--evaluations generally have not determined whether funded projects effectively reduced accidents, and

--many measures that are believed to improve highway safety are not implemented by the States.

GAO makes several recommendations to the Secretary of Transportation to improve the Federal administration of the program. GAO also provides alternatives that the Congress should consider in determining the Federal Government's future role in highway safety.

CED-81-16
OCTOBER 15, 1980

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A

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-197403

To the President of the Senate and the
Speaker of the House of Representatives

This report describes the Department of Transportation's major funding effort to reduce traffic accidents and related deaths, injuries, and property damage. It identifies many obstacles affecting the Federal, State, and local governments' abilities to effectively reduce the problem.

We made this review because the Department of Transportation has spent nearly $1.3 billion in 13 years on the Highway Safety Grant Program and yet traffic death rates have been steadily increasing since 1976.

We are sending copies of this report to the Director, Office of Management and Budget; the Secretary of Transportation; State highway safety representatives; and other interested parties.

Comptroller General
of the United States

B

COMPTROLLER GENERAL'S REPORT TO THE CONGRESS

HIGHWAY SAFETY GRANT PROGRAM ACHIEVES LIMITED SUCCESS

D I G E S T

In 13 years the Department of Transportation has spent nearly $1.3 billion in Federal grant funds to help carry out State highway safety programs designed to reduce traffic accidents, deaths, injuries, and property damage. Motor vehicle death rates (per miles traveled, per registered vehicle, and per U.S. population) have been significantly reduced since Federal involvement. That trend, however, was apparent before the Highway Safety Grant Program, and since 1976 death rates have been steadily increasing each year. In terms of individual fatalities, traffic accidents continue to cause more than 50,000 deaths a year. (See pp. 1 and 4.)

Because of changing, and sometimes conflicting, directions from the legislation, the Department of Transportation, and the States, the Highway Safety Grant Program has addressed a multitude of safety activities that may not have been the most effective. (See p. 12.) This situation is further complicated because few highway safety projects have yet been shown to have a positive or lasting effect on accident reductions. (See p. 23.) Conversely, many measures that are believed to contribute significantly to highway safety have not been implemented, or have been implemented incompletely, inefficiently, or only temporarily by the States. (See p. 35.)

Measuring the effectiveness of this program as it is presently administered is, at best, difficult. However, GAO believes that some corrective action could be taken, and therefore recommends that the Secretary of Transportation:

--Establish criteria that describe how much problem identification and data analysis States need to address their highway safety problems and evaluate results. (See p. 20.)

Tear Sheet. Upon removal, the report cover date should be noted hereon.

--Work with States to ensure that the criteria are followed. (See p. 20.)

--Develop a plan that outlines what safety evaluations will be performed to determine the effectiveness of funded activities and establish a method for coordinating that plan among States to avoid duplication. (See p. 32.)

--Establish a method for disseminating successful as well as unsuccessful evaluation results among all States and require that these results be considered before funding future safety activities. (See p. 32.)

In the long run, GAO believes that the Congress needs to determine what role the Federal Government is to play in future highway safety activities and then alter the safety grant program to reflect that role.

--If the Federal role is to continue administering the program, the Congress could decide to increase the Department's administrative authority and improve its leadership role to make it more effective. (See p. 47.)

--If the Federal role is to help finance safety activities in State-identified problem areas, the Congress could decide that little further need exists for the Department's involvement in the program other than to provide technical assistance to the States. Therefore, States could be funded more directly. (See p. 49.)

--If State and local governments are to assume responsibility for financing and administering future highway safety activities, the Congress could decide that the program, which represents only 2 to 3 percent of the total funding and which may have already served its purpose, could be discontinued. (See p. 50.)

PROGRAM DIRECTION

The Department of Transportation (1) requires that States identify their most pressing

highway safety problems and select appropriate activities to solve them, (2) administers 18 uniform safety standards that States can address in their highway safety programs, and (3) encourages them to address at least the 6 uniform safety requirement areas it developed from the standards. In addition, the Highway Safety Act requires that special attention be given to safety areas outside the uniform standards and requirement areas, such as complying with the 55 mile-per-hour speed limit. This multidirectional approach dilutes the concentration of efforts in any given area that may have a greater chance for success. (See p. 12.)

PROGRAM EVALUATION

The Department of Transportation also requires that States evaluate the effectiveness of their highway safety programs, but it does not have a planned and coordinated approach for evaluating highway safety activities. Neither has it developed an effective method for disseminating evaluation information statewide when successful and unsuccessful evaluation results have been determined. The Department hopes to improve its evaluation capabilities in the future, but limited funds may delay these plans. (See pp. 28 and 29.)

OTHER MATTERS THAT AFFECT PROGRAM SUCCESS

In addition to problems in Federal administration of the Highway Safety Grant Program, other problems have a significant impact on the program's success. Legislators in 27 States, for example, have repealed or weakened motorcycle helmet-use laws and no State has adopted a mandatory seatbelt-use law, even though studies show that these measures will save lives. (See p. 35.)

Some States have not used all the safety grant funds available to them and State organizations outside the program oppose regulations that would require one agency to coordinate all State safety activities. (See pp. 38 and 40.)

The program is publicized as being carried out by cost sharing, but there are few requirements that it operate in that manner. Further, the unevenness with which local government's cost sharing is applied in each State clouds the extent to which the program's cost is actually being shared. (See pp. 43 and 44.)

STATE COMMENTS

GAO asked the safety representatives of the nine States discussed in this report to review and comment on the draft report, except for the recommendations and alternative sections. Eight States responded. While some State comments added support to the report findings and conclusions, others warranted further clarification and have been addressed in this report. (See pp. 10, 20, 32, and 45.) Further, the States' detailed comments, and GAO's overall evaluation of them, are published as a supplement (CED-81-16A) to this report.

AGENCY COMMENTS

In commenting on the draft report, the Department of Transportation stated that the National Highway Traffic Safety Administration had reviewed the report and generally disagreed with GAO's findings and conclusions. The Safety Administration provided detailed information on what it believed to be the true perspective of the Highway Safety Grant Program, which the Safety Administration said GAO had failed to recognize. (See p. 10.)

GAO evaluated each comment in the Department's reply to the draft report and found that, to the contrary, the Safety Administration agreed with some of GAO's conclusions, even though the Safety Administration generally disagreed with the findings that preceded the conclusions. (See pp. 33 and 45.) These comments provided information that GAO believed did not warrant changing its conclusions, recommendations, and alternatives. The Safety Administration, however, believed that it was already complying with GAO's recommendations and disagreed with the alternatives that GAO

presented for consideration by the Congress. (See p. 51.)

The Department's summary comments, along with GAO's evaluation, are located at the end of each chapter. (See pp. 21, 33, and 45.) Because of the volume of the position statements made by the Safety Administration, the detailed comments and GAO's evaluation have also been published as a supplement (CED-81-16A) to this report.

CHAPTER 1

INTRODUCTION

The motor vehicle driver is the leading cause of accidental death in the United States. In a 1979 study done for the Department of Transportation (DOT), human factors rather than roadway or vehicle defects were cited as probable cause in more than 90 percent of the motor vehicle accidents that were investigated at the scene of the accident.

In 1965, motor vehicle accidents caused more than 49,000 deaths--a toll that represented nearly one-half the accidental deaths reported that year. The Congress subsequently expressed the need for strong Federal leadership to control these losses and, on September 9, 1966, enacted the Highway Safety Act of 1966 (23 U.S.C. 401 et seq.).

Specifically, under 23 U.S.C. 402, each State is directed to implement a highway safety program designed to reduce traffic accidents and related deaths, injuries, and property damage. The act authorizes Federal financial assistance to carry out the State safety programs, but does not establish any specific goal to be achieved. Up to 5 percent of the funds may be deducted for Federal administration costs and the remaining funds are apportioned among the States: 75 percent based on each State's share of the total U.S. population and 25 percent based on each State's share of the total U.S. public road mileage. At least 40 percent of the funds must be spent at the local government level.

After 13 years of Federal assistance to highway safety, nearly $1.3 billion has been obligated under the safety grant program. 1/ From fiscal year 1967 through 1979, annual obligations increased from $2 million to $200 million. (See chart 1.) However, funding for the first 2 years was spent on startup administration, not specific projects. Further, these annual obligations excluded inflationary factors that would have shown the actual increases in constant dollars. Federal funds represent only 2 to 3 percent of the total funds that State and local governments spend to further support the safety grant program and to continue safety activities they funded before the 1966 act. Despite these combined safety efforts, motor vehicle accidents now cause more than 50,000 deaths a year--a toll greater than that reported before the 1966 act. (See chart 2.)

1/This total does not include fiscal year 1980 obligations of about $220 million.

CHART 1

HIGHWAY SAFETY GRANT FUNDS OBLIGATED
FISCAL YEARS 1967 THRU 1979

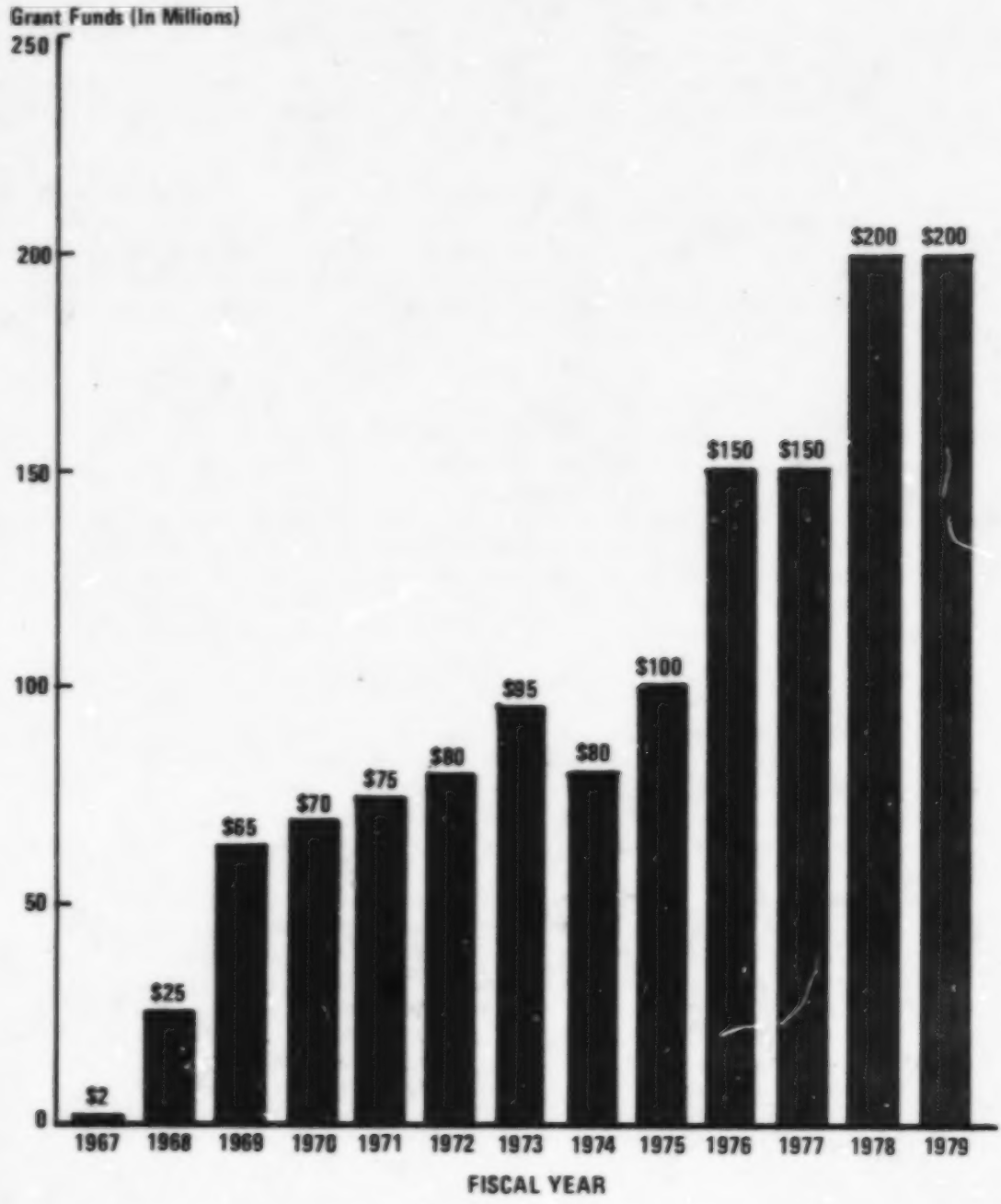
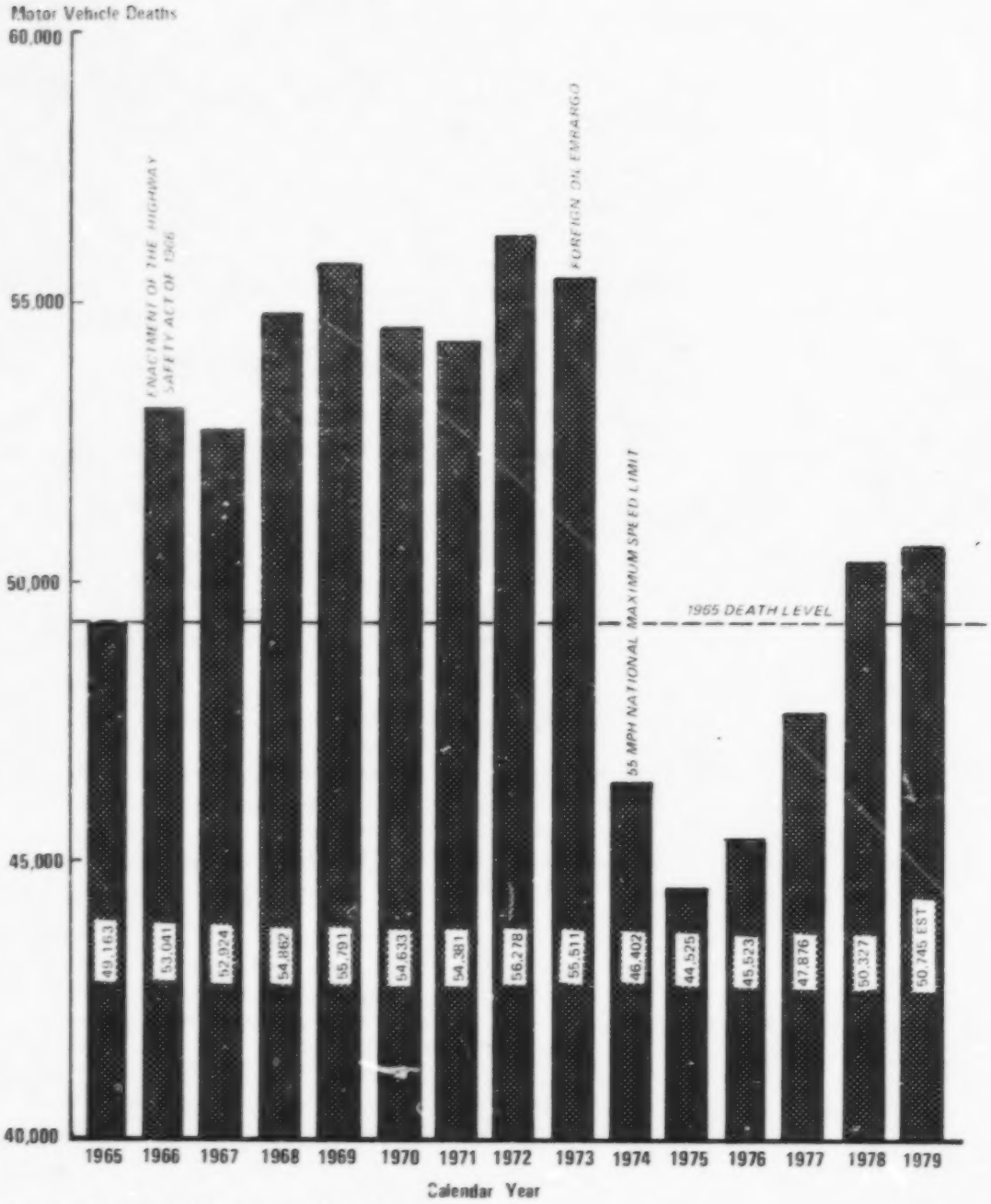


CHART 2

MOTOR VEHICLE DEATHS 1965 THRU 1979



SOURCE: 1965–1974 NATIONAL SAFETY COUNCIL
1975–1979 DEPT. OF TRANSPORTATION

The only time motor vehicle deaths dropped below the 1965 level was during the 4-year period immediately following the foreign oil embargo against the United States in 1973 and the subsequent enactment of the 55-mile-per-hour national maximum speed limit law in 1974 (Public Law 93-239). These two events, however, cannot be attributed to the safety grant program.

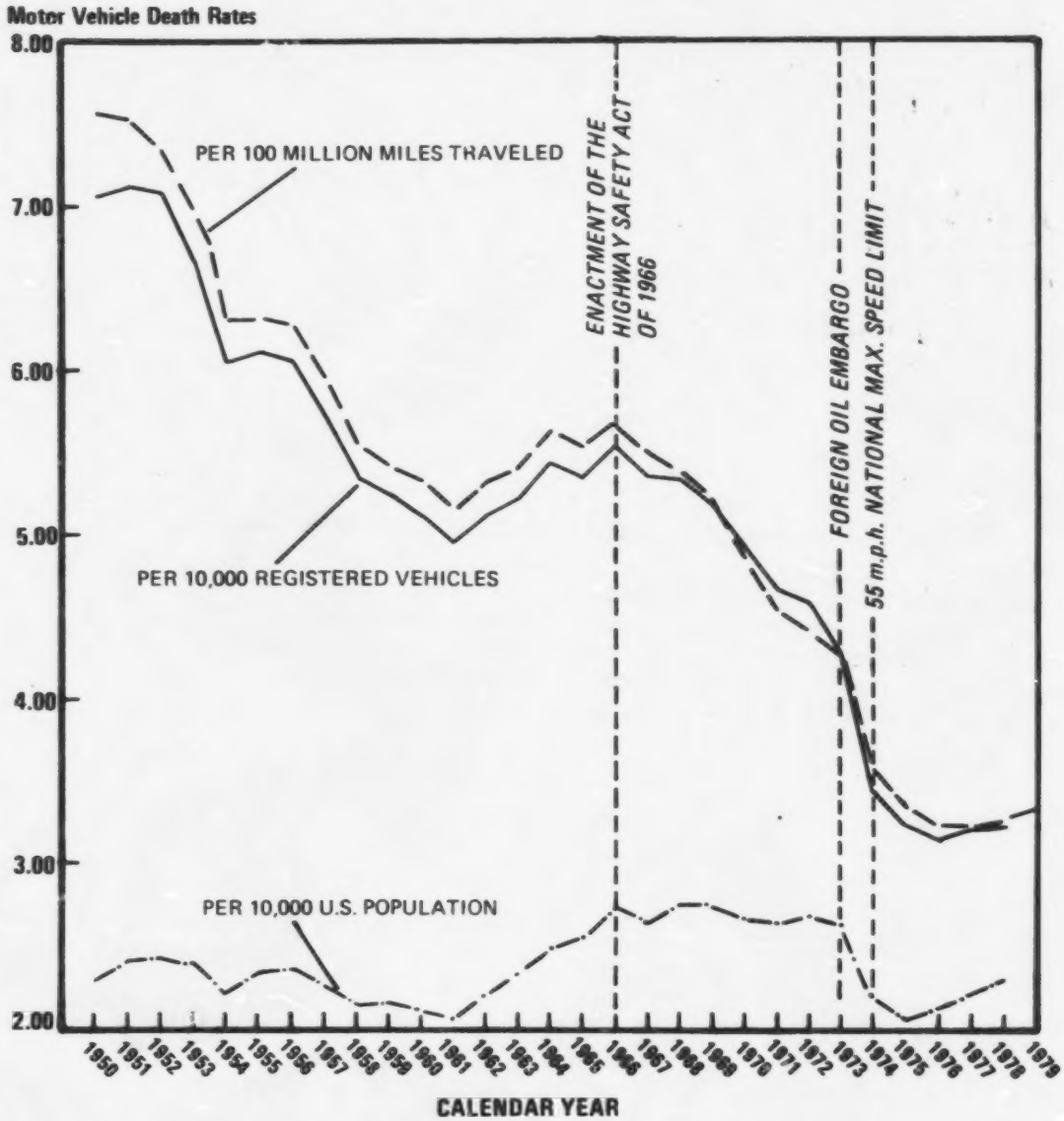
When motor vehicle death rates per 100 million vehicle miles traveled, per 10,000 registered vehicles, and per 10,000 U.S. population are compared, the picture has been somewhat brighter, but is dimming. From 1966 through 1976--the first 10 years of the safety grant program--motor vehicle death rates showed substantial reductions, yet this trend was apparent many years before the program. In addition, other factors, including road and vehicle improvements and economic conditions, may have influenced some of these rate reductions. Unfortunately, since 1976 motor vehicle death rates have steadily increased each year. (See chart 3.)

As previously mentioned, Federal funds provided under the safety grant program are only a small portion of the total funds spent on highway safety. Nevertheless, these funds have grown substantially since 1976, with little evidence that increased funding has resulted in a corresponding improvement in highway safety. This situation, coupled with rising demands for greater restraints on Federal spending and pressure to balance the Federal budget, caused the House Appropriations Committee in 1979 to question the safety grant program's increased cost and lack of proven effectiveness. In January 1980 DOT responded to the Committee by issuing "An Assessment of State and Community Highway Safety Programs, FY 1975-FY 1979." The primary focus of the DOT report was on program costs and benefits for fiscal years 1975-79. The report recognized the difficulty in trying to demonstrate how the safety grant program had contributed to accident reductions by stating:

> "Unfortunately, the dynamic environment in which crashes occur, the diverse and complex nature of the factors contributing to crashes, and the lack of solid empirical data confounded by factors over which government has no control, all combine to make it extremely difficult in a truly scientific way to relate combined human factors oriented safety program activities to this illusive 'bottom line' of accident reduction."

CHART 3

MOTOR VEHICLE DEATH RATES 1950 THRU 1979


Motor Vehicle Death Rates
8.00
7.00
6.00
5.00
4.00
3.00
2.00
PER 100 MILLION MILES TRAVELED
PER 10,000 REGISTERED VEHICLES
PER 10,000 U.S. POPULATION
ENACTMENT OF THE HIGHWAY SAFETY ACT OF 1966
FOREIGN OIL EMBARGO
55 m.p.h. NATIONAL MAX. SPEED LIMIT
1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979
CALENDAR YEAR

SOURCE: 1950 - 1974 NATIONAL SAFETY COUNCIL
1975 - 1979 DEPT. OF TRANSPORTATION

Despite this recognition, the assessment report concluded that the safety grant program had, among other things, shown growth in the quality and quantity of State safety programs, reduced death and injury on the Nation's highways, and catalyzed State efforts in dealing with high priority safety problems.

PROGRAM EMPHASIS HAS CHANGED SINCE THE 1966 ACT WAS ENACTED

Section 402 of title 23 U.S.C. requires that each State have a highway safety program, approved by the Secretary of Transportation, in accordance with uniform Federal standards promulgated by the Secretary. The act requires that the standards include provisions for improving such diverse areas as

--driver performance, education, testing, examinations, and licensing;

--pedestrian performance and bicycle safety;

--accident records and investigations;

--vehicle registration, operation, and inspection;

--highway design and maintenance;

--traffic control;

--vehicle codes and laws;

--surveillance of high or potentially high accident locations; and

--emergency services.

The Secretary is authorized to amend or waive standards temporarily for the purpose of evaluating the effectiveness of other experimental or demonstration programs, if such action serves the public interest.

Between June 1967 and May 1972, the Secretary promulgated 18 uniform Federal standards to be addressed in State highway safety programs. (See app. I.) Fourteen standards relate to drivers and vehicles and are administered by DOT's National Highway Traffic Safety Administration (NHTSA); 3 standards relate to highways and are administered by DOT's Federal Highway Administration (FHWA); and 1 standard relates to pedestrian safety and is jointly administered by NHTSA and FHWA.

The 1966 act directed the Secretary to withhold all safety grant funds from any State not having an approved program. In addition, the State's Federal-aid highway funds were to be reduced 10 percent until an approved program was implemented. In 1976, the act was amended, eliminating the penalty against the Federal-aid highway funds and directing the Secretary to withhold from 50 to 100 percent of a State's safety grant funds pending an approved program.

In late 1972, NHTSA tried to speed implementation of certain standards by issuing a "must" list of 13 highway safety activities that States would be required to implement within a fixed time frame. The list included adopting laws for mandatory motorcycle helmet use, classified driver licensing, and periodic motor vehicle inspection. States complained to the Congress that they had not been consulted in advance. In addition, NHTSA stated that the Congress also expressed its dissatisfaction with DOT over the degree of consultation with them before issuing the final two standards--pupil transportation safety and accident investigation and reporting. So, in 1973 the 1966 act was amended to prohibit the Secretary from revising existing standards or promulgating new standards without congressional approval.

In 1974, NHTSA again tried to develop a list of highway safety activities for rapid implementation by the States. This time, the list contained five elements of the existing standards, namely:

--Effective alcohol countermeasure implementation.

--Mandatory motorcycle helmet use.

--Motor vehicle inspection.

--Selective traffic law enforcement.

--Improved emergency rescue and medical services.

During 1974 and 1975, the Secretary also took action to withhold funds from several States that had failed to enact legislation in accordance with certain elements of the alcohol, motorcycle safety, and motor vehicle inspection standards. The States again expressed dissatisfaction, and in 1976 the act was further amended to read:

> "** * * Implementation of a highway safety program under this section (402) shall not be construed to require the Secretary to require compliance

with every uniform standard, or with every element of every uniform standard, in every State."

The 1976 amendment specifically forbade the Secretary from requiring any State to enact a mandatory motorcycle helmet-use law. Thus, the Secretary was no longer required to have States address every uniform standard.

The 1976 amendment also directed the Secretary to evaluate the adequacy and appropriateness of the 18 uniform standards and report the findings to the Congress by July 1, 1977. In the report, entitled "An Evaluation of the Highway Safety Program, July 1977," the Secretary concluded that mandatory compliance with the 18 uniform standards was no longer appropriate, as it could stifle States' innovation and could even be counterproductive.

The Secretary recommended to the Congress that the 18 uniform standards be replaced with 6 uniform requirement areas that must be satisfied by all States. These requirement areas were developed from selected aspects of the standards and consisted of:

--Rules of the road.

--Driver licensing.

--Vehicle registration, titling, and theft.

--Traffic control devices.

--Highway design, construction, and maintenance.

--Traffic records systems.

The Secretary concluded that beyond the six uniform requirement areas, each State would be better served by identifying its own serious safety problems, selecting solutions to counter those problems (countermeasures), and evaluating the effectiveness of those solutions.

The Congress basically agreed that States should have the flexibility to tailor their highway safety programs to individual, identified needs. The Congress, however, did not go along with the Secretary's recommendation to replace the 18 uniform standards with 6 uniform requirement areas since the 1976 amendment to the act already allows the Secretary the discretion of having States implement or not implement elements of each standard.

OBJECTIVES, SCOPE, AND METHODOLOGY

The safety grant program's objective is to reduce traffic accidents and related losses. In that regard, the purpose of our review was to identify major problems that prevented the program from accomplishing that objective and to make recommendations or suggest alternatives to correct those problems.

We conducted our review at NHTSA and FHWA headquarters in Washington, D.C.; NHTSA regional offices in Linthicum, Maryland; Chicago Heights, Illinois; Fort Worth, Texas; and Lakewood, Colorado; and FHWA regional offices in Baltimore, Maryland; Homewood, Illinois; Fort Worth, Texas; and Lakewood, Colorado. In addition, we conducted work at State highway safety agencies and FHWA division offices in Maryland, Pennsylvania, Illinois, Ohio, Texas, New Mexico, Colorado, South Dakota, and Utah.

We interviewed Federal and/or State highway safety officials about the following aspects of the safety grant program:

--The ability of Federal and State governments to perform adequate safety planning through data analysis and problem identification techniques.

--The ability of Federal and State governments to select effective countermeasures and perform conclusive evaluations.

--The commitment that is given or needed by all parties to make the safety grant program successful.

--The requirements that affect how the safety grant program is carried out, including mandating (earmarking) grant funds to specific safety areas.

In addition, we reviewed the States' annual highway safety plans for fiscal years 1979 and 1980 and traced the funding and performance of many highway safety projects addressed in those plans. We also reviewed completed project evaluations when available to determine how adequately States were able to relate their projects to accident reductions.

We chose the nine States because of the following variances:

--Four of the States are in the West, where motor vehicle fatalities increased 25 percent from 1975 to 1978; three of the States are in the Midwest,

where fatalities increased 11 percent; and two of the States are in the Northeast, where fatalities increased 3 percent.

--Approximately 25 percent of the total safety grant funds were provided to those nine States, ranging by State from about $6 million to about $50 million.

--Approximately 25 percent of recent motor vehicle fatalities occurred in those nine States, ranging by State from about 200 to about 3,600 fatalities annually.

After the information was collected from NHTSA, FHWA, and the State safety agencies, we grouped together problem areas that seemed to be most prevalent throughout the Highway Safety Grant Program.

HANDLING STATE COMMENTS

We asked the Governors' highway safety representatives in the nine States we visited to comment on our draft report. In keeping with our Office policy, we did not include the recommendations and the alternatives chapter of the draft report, as they were addressed to the Secretary of Transportation and the Congress, respectively.

We received responses from eight of the nine States. In some cases, their specific comments added support to or warranted further clarification of our report findings, and appropriate changes have been incorporated in this report. In addition, we have responded to the States' comments on our conclusions in each respective chapter in this report, and have summarized, to the extent possible, their remaining comments in a separate supplement (CED-81-16A) to this report.

HANDLING AGENCY COMMENTS

On July 11, 1980, DOT commented on our draft report, stating NHTSA had reviewed the report and generally disagreed with our findings and conclusions. (See app. II.)

DOT provided us with 44 pages of detailed comments which it stated represented NHTSA's position. The detailed comments, for the most part, provided information on what NHTSA believed to be the true perspective of the highway safety grant program, which NHTSA said we had failed to recognize. Many of the comments were irrelevant because they did not address the issues being discussed in our report.

NHTSA was not receptive to any of the recommendations or alternatives presented in the report. However, our evaluation of the detailed agency comments revealed that NHTSA did concur with some of our report conclusions, even though NHTSA generally disagreed with the findings that preceded those conclusions. None of NHTSA's comments provided information that, in our opinion, warranted changing our conclusions, recommendations, and alternatives.

We have responded to NHTSA's summary and detailed comments by evaluating

--its comments on our conclusions, recommendations, and alternatives at the end of each respective chapter in this report and

--its entire comments in a separate supplement (CED-81-16A) to this report.

Any changes to the draft report that resulted from NHTSA's comments are incorporated in this final report. Those changes are also noted in the report supplement.

CHAPTER 2

THE SAFETY GRANT PROGRAM NEEDS

DIRECTION FROM THE CONGRESS

Because of changing, and sometimes conflicting, directions from the legislation, DOT, and the States, the safety grant program has addressed a multitude of safety activities that may not have been the most effective. The program needs to have a clear, specific direction from the Congress, defining a limited number of areas or problems to address, before its effect on reducing accidents can be measured.

The 1966 act, as amended, requires that State highway safety programs address uniform standards, but allows the Secretary the discretion to determine whether every element of every standard must be addressed by every State. In addition, legislation requires that the States give specific attention to several areas outside the standards area, such as seatbelt use and 55-mile-per-hour compliance.

Meanwhile, DOT, through NHTSA and FHWA, administers the 18 uniform standards and encourages the States to address at least the 6 uniform requirement areas it identified in 1977. At the same time, DOT requires States to perform detailed data analysis to identify their most pressing safety problems.

Thus, State highway safety agencies are required to apply their safety efforts to (1) addressing DOT's 18 uniform standards or 6 requirement areas, (2) funding specific problems identified by either legislation or DOT, and (3) addressing other State-identified problems.

This multidirectional approach causes the program to address a large number of safety activities, but dilutes the concentration of efforts in any given area that may have a greater chance for success. Further, this situation is complicated by DOT's lack of criteria for identifying significant safety problems and NHTSA regional offices' inconsistent approval of State safety projects.

FEDERAL IDENTIFICATION OF PROBLEMS MAY CONFLICT WITH ACTUAL NEEDS

DOT requires State safety agencies to identify their most pressing problems, select appropriate countermeasures, and evaluate program effectiveness. State highway safety officials in Maryland and South Dakota have found this method

to be beneficial and a much more natural means of managing the safety grant program. Thus, these States accept and support the DOT requirement. However, NHTSA regional administrators in Chicago Heights, Illinois, and Lakewood, Colorado, in expressing complaints frequently made by safety representatives, said that less than one-third of grant funds are available to solve problems identified by the safety agencies should they differ from those identified by the legislation or DOT.

Since 1976, legislation or DOT has required that specific grant funds be spent in four areas: schoolbus driver training, seatbelt use, high payoff programs 1/, and 55-mile-per-hour compliance. Requiring grant funds to be spent in areas that the Federal Government has identified as problems often results in safety agencies'

--addressing areas where they have identified little or no problem (such as schoolbus driver training),

--spending additional funds in areas where they believe adequate funding already exists (such as 55-mile-per-hour compliance), and

--implementing countermeasures that they are not sure will be effective (such as anti-drinking driver programs and seatbelt use campaigns).

Schoolbus driver training

From 1976 through 1978, $21.5 million in grant funds was earmarked by the legislation specifically to encourage expanding schoolbus driver training programs. However, none of the safety agency officials we talked with in the nine States had identified a need to expand such training. These officials believed that their States had adequate schoolbus driver training programs, supported with State funds, before the legislation. They also believed that Federal earmarking resulted in safety agencies either not spending funds, or, more frequently, spending funds for schoolbus driver training even though the funds could have been better spent elsewhere. (We reported similar findings to DOT in 1977 and at that time recommended that the Secretary propose legislation to repeal this required funding. The Secretary did not act on our recommendation because, since fiscal year 1978, the

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1/High payoff programs address those areas that have high potential for reducing accidents.

legislation has not earmarked any additional funds for schoolbus driver training. Nevertheless, much of the prior earmarked funds remains unspent.)

Pennsylvania, in its fiscal year 1980 safety plan, identified schoolbus driver training as an area that could not be defined as a significant problem. The plan states:

> "School Bus Driver Training - Despite a relatively low accident involvement, the Congress requires expenditures of Highway Safety Funds and State matching funds for further training of school bus operators. Based on exposure (vehicle miles traveled) school buses have probably the lowest accident involvement of any class of traffic, (e.g., 0.01 occupant fatalities and approximately 2.0 occupant injuries per 100 million vehicle miles)."

Texas was authorized $1.2 million for schoolbus driver training in fiscal years 1976-78. By the end of fiscal year 1979 (4 years after the funds were authorized), Texas had spent only about half of the $400,000 in 1976 funding and none of the almost $800,000 earmarked in 1977 and 1978. States lose funds if they do not use them because the legislation does not permit them to be spent on other safety problems.

Seatbelt use

In 1976, DOT reported to the Congress that 90,000 deaths could be prevented over a 10-year period if motorists used their seatbelts. A recently released DOT study shows that only 10.9 percent of the drivers in 1979 used their seatbelts. This represents a 22-percent decline from the 14-percent use DOT reported in 1978. For fiscal years 1979 and 1980, legislation mandated that 2 percent, or about $6.8 million of the grant funds, be spent to encourage seatbelt use. All safety agency officials we visited agreed that not using seatbelts was a problem.

Safety agency officials in New Mexico, Illinois, Texas, and Maryland told us that they did not know the most effective way to get people to wear seatbelts. For the most part, safety agencies are using the mandated funds for public information campaigns to encourage seatbelt use. However, a bureau director in the Illinois safety agency told us that a research study had shown that public information campaigns have not been successful. The Ohio safety agency found that such lack of success related to NHTSA's restrictions on using safety grant funds to purchase advertising time for traffic safety messages.

High payoff programs

In fiscal years 1976-78, $85.2 million in grant funds were directed to high payoff programs. NHTSA identified three program areas to be addressed with high payoff funds: alcohol countermeasures, 55-mile-per-hour speed limit compliance, and selective traffic enforcement. 1/ A fourth program area was reserved for other problems to be identified by the States. The deputy director, and the chief, programs section, of Maryland's safety agency told us it was sometimes difficult to spend all the funds to address NHTSA-identified problem areas. The chief, program services division, of Pennsylvania's safety agency said that NHTSA's high payoff areas did not always correspond with those identified by the safety agencies. In addition, safety agency officials in New Mexico and Illinois said that they did not know how to solve alcohol-related problems and that safety improvements resulting from selective enforcement activities were only temporary.

55-mile-per-hour national maximum speed limit

In 1978 legislation was enacted that required all States to meet certain 55-mile-per-hour compliance levels each year or lose part of their annual Federal-aid highway funds. Both legislation and NHTSA have mandated funds to address 55 mile-per-hour compliance since 1979. The following chart illustrates funding levels for enforcing 55-mile-per-hour compliance as well as the other safety activities funded through NHTSA.

	55 mph compliance	Other NHTSA-funded safety activities
	(millions)	
FY 1979	$40	$127
FY 1980	20	167
FY 1981 (note a)	50	143

a/NHTSA's budget proposal, which does not include $7 million in a 55-mile-per-hour incentive fund or $2 million for innovative grants.

1/Selective traffic enforcement generally means assigning resources such as traffic officers to enforce particular laws, for example, speeding or drinking violations, at particular locations and times to assure optimum reductions in traffic accidents.

NHTSA's 1981 budget estimates report indicated that all States would probably meet the 1979 compliance level. In addition, an FHWA tabulation of 1978 speed data showed that 10 States (including Puerto Rico) had already exceeded the 1981 compliance level. Yet, all States must still spend the mandated funds on 55-mile-per-hour enforcement rather than on other safety activities. The deputy director of Colorado's safety agency told us that his State was currently meeting the 1982 compliance level and therefore should not be required to spend its funds in the enforcement area. He said that hard feelings are created within the State government when it is forced to spend money in an area that is already in compliance. The director of Ohio's safety agency stated that the mandated funds should be flexible, depending on what each State perceives as its immediate priority.

Spending grant funds to enforce the 55-mile-per-hour speed limit posed a problem for some States in fiscal year 1979. South Dakota, Utah, and New Mexico were hesitant to increase the size of their State police or highway patrols for the sole purpose of enforcing the speed limit, and Ohio was unable to recruit qualified personnel. Therefore, the safety agencies generally were limited to either funding projects that paid overtime to patrol officers or having to carry over large balances of unused grant funds to subsequent fiscal years. Safety agency officials said that it was often difficult to find patrol officers willing to work enough overtime hours to spend all the mandated funds. In contrast, however, the chief, safety projects section, of the Illinois safety agency, told us that his State had been able to find enough patrol officers willing to work the overtime hours.

DOT HAS NOT ESTABLISHED CRITERIA TO DETERMINE SIGNIFICANT PROBLEMS

DOT has not established specific criteria to determine how significant a problem must be before a State can use grant funds to try to resolve it. As a result, Federal grant funds are being used to implement almost any safety project regardless of its impact on reducing accidents. Further, most of the safety agencies we reviewed still lack the capability to adequately identify their problems.

DOT's Highway Safety Program Manual establishes policy and procedures for the submission of each State's highway safety plan, which is the basis for Federal funding of the State's highway safety program. The manual requires that States' efforts to identify problem areas consider, at a minimum, analyzing data in the following areas:

Pedestrian accidents	Roadside and roadway hazards
Motorcycle accidents	Alcohol involvement
Pedalcycle accidents	Youth involvement
Passenger car accidents	Defective vehicle involvement
Schoolbus accidents	Suspended/revoked driver involvement
Truck accidents	Safety belt use
Problem drivers	Speed involvement

In addition, DOT's problem identification manual also identifies other problem areas including:

Emergency medical services	Driver licensing
Law enforcement	Vehicle registration
Adjudication	High accident locations

Volume II of the problem identification manual identifies 53 model problem identification reports that can be generated through data analysis. It states that "these model reports are by no means the only reports that should be generated but represent a small sample of potentially useful reports" to identify problems. It also states that problem identification is limited only by the availability or lack of availability of data within the traffic records system.

During recent appropriations hearings, NHTSA's Associate Administrator for Traffic Safety Programs said that all safety agencies would be able to adequately identify their safety problems within a year. However, eight of the nine safety agencies we reviewed either lacked adequate problem identification capabilities, lacked access to traffic record data, or lacked both. In addition, safety agency officials in South Dakota, Texas, Colorado, and Maryland said that information in their traffic record systems was either unreliable or there was no way to assess its reliability. We believe that unless reliable data is available, safety agencies will not be able to identify their most significant or solvable problems.

--The Colorado safety agency relies on data developed by several other State agencies for its problem

identification. For example, it uses data collected by the Department of Revenue and the Motor Vehicle Division for their own purposes. Safety agency officials in the evaluation branch told us that depending on other State agencies for traffic records caused major problems, including untimely, inaccurate, inaccessible, and incomplete data. The safety agency director told us it would be extremely expensive to correct these problems, and even so, the data probably would not show anything new or affect the way the safety agency spends its grant funds.

--The South Dakota safety agency did not have any staff members with data analysis capability so it contracted for the data analysis in its 1980 safety plan. A safety agency program manager told us that major decisions were not based on the data analysis alone because in many cases data in the records was not reliable. However, the director of the division of highway safety said that improvements are being made and that the data analysis for the 1981 safety plan was done totally in-house.

--An NHTSA/FHWA assessment report of New Mexico's accident records system said that the State's current reporting procedures, together with an apparent lack of stringent quality control, may tend to bias the accident data collected. The State, however, is currently planning to increase its quality control procedures.

Safety agencies generally do not understand how much problem identification and data analysis is needed to satisfy DOT requirements. As a result, safety agencies tend to perform their analyses in such detail that the expected reduction would have very little impact on overall State accident reductions. For example:

--The Texas safety plan for fiscal year 1980 indicates that intensive analyses of 1977 accident data showed that there were 71 fatal traffic accidents at construction sites. Those fatalities represented 1.9 percent of the 3,698 State fatalities that year. The plan recommends that advance warning signs be posted to reduce the number of accidents at construction sites. Although the Texas plan does not establish numerical goals to reduce traffic accidents at construction sites, the maximum goal established for any countermeasure in the State is a 2-percent accident reduction. If that goal is met, it will result in a reduction of only one fatality

and will likely have no effect on overall State accident reductions.

--The Illinois safety plan for fiscal year 1980 indicates that 2,166 people were killed in traffic accidents in 1978. Because further detailed refinement of the data showed that 68 pedestrians in the 5- to 9-year-old age group were killed, $75,000 in grant funds was allocated to implement a crossing guard program. This pedestrian problem represented about 3 percent of the State's fatalities. If the safety agency reaches its countermeasure goal, it will reduce this pedestrian problem by three fatalities, which represents one-tenth of one percent of the State's overall traffic accident problem.

--The Utah safety plan for fiscal year 1980 indicates that 46,000 accidents occurred in 1978. One city, Richfield, had 87 of these accidents, or 0.2 percent of the total, and ranked 32d in Utah's city rankings by total accidents. The safety agency allocated $15,000 to decrease Richfield's accidents by four.

The lack of specific criteria to determine which problems should be addressed has also caused confusion in approving safety projects. We found that NHTSA's regional offices are not always consistent in approving projects because they have different views on what constitutes significance. For example, New Mexico's safety agency wanted to fund a selective enforcement project in a rapidly growing community to prevent the number of accidents from rising. Safety agency officials said that NHTSA's Fort Worth regional office would not allow projects to be funded in areas that were not yet overrepresented in accidents. In other words, the safety agency had to wait for accidents to happen before it could implement countermeasures to prevent them. In contrast, safety agency officials in NHTSA's Lakewood, Colorado, region said that they were allowed to use their grant funds for projects in locations that were not yet overrepresented.

Furthermore, some NHTSA regional offices appeared to review some State safety plans inconsistently. For example, when Pennsylvania's safety plan called for 70 replacement ambulances to comply with DOT-recommended equipment standards and to reduce overall response times, NHTSA's Linthicum, Maryland, regional office gave its approval. Yet, when the New Mexico plan included projects to purchase ambulances to comply with DOT standards and to improve response times, that portion of its plan was not approved by NHTSA's Fort Worth regional office, pending more detailed problem analysis.

CONCLUSIONS

Currently, the safety grant program is guided in multiple directions by legislation, DOT, and the States. This results in safety grant funds being spent to address a multitude of safety problems, but dilutes the concentration of efforts in any given area that may have a greater chance for success. Such unclear direction makes it difficult, if not impossible, to accurately measure the safety programs' effectiveness. The alternatives provided to the Congress in chapter 5 further address this issue.

In addition, DOT has not developed criteria to determine how significant a problem should be before it can be funded under the safety grant program. As a result, safety agencies tend to perform their analyses of accident data in such detail that the expected accident reductions would have little impact on overall Statewide accident reductions.

RECOMMENDATIONS TO THE SECRETARY OF TRANSPORTATION

We recommend that the Secretary of Transportation:

--Establish criteria that describe how much problem identification and data analysis the States need to address their safety problems and to evaluate results.

--Work with State safety agencies to ensure that the criteria are followed.

STATE COMMENTS AND OUR EVALUATION

Maryland's Secretary of Transportation/Governor's representative for highway safety responded to our draft report conclusions by stating that it would be difficult for NHTSA, FHWA, or any other agency to establish equitable, practicable criteria that could be employed in problem identification and project funding. In addition, he stated that analyses which go beyond that needed for the type of problem involved usually waste time and funds, and can easily lead to erroneous conclusions and ineffective countermeasures. We recognize that these difficulties exist but believe that, unless the Secretary of Transportation takes the lead in establishing such criteria, the impact of the various projects funded under this program will continue to be difficult to measure.

Utah's commissioner of public safety agreed with the contents of this chapter but stated that criteria on problem

identification and data analysis should recognize the uniqueness of the States and should not be established on a national level. The commissioner also stated that there should in fact be more priority-setting of problems and needs on a State-by-State basis and that earmarking funds is not the desired approach due to the limitations imposed on a State's ability to address unique priorities.

Colorado's director of the division of highway safety, State Department of Highways, agreed that the States were addressing a multitude of problems. However, he maintained that the act itself and the 18 standards provided a clear direction as to the intent of the Congress. The director stated that the lack of clear direction for the safety grant program comes from mandating programs for which there has not been an identifiable problem. We believe we adequately covered that point in this report when we discussed the mandating of funds for schoolbus driver training, seatbelt use, high payoff programs, and the 55-mile-per-hour national maximum speed limit. (See pp. 15 to 18.)

AGENCY COMMENTS AND OUR EVALUATION

NHTSA disagreed with our conclusion that the safety grant program is being guided in multiple directions by legislation, DOT, and the States. NHTSA recognized in its comments, however, that the Congress and NHTSA are using part of the safety grant funds to direct emphasis toward the solution of problems perceived at the national level, while the remaining funds are available for the States to address additional problems identified by the States.

We believe that funding projects identified by three different entities in a wide range of areas causes the safety grant program to lose focus and go in multiple directions. Further, safety agency officials told us that this approach causes them to address areas where they have identified little or no problem, spend additional funds in areas where they believe adequate funding already exists, and implement countermeasures that they are not sure will be effective.

Regarding our recommendation that the Secretary of Transportation establish criteria which describe how much problem identification and data analysis States will need to address their safety problems and evaluate results, NHTSA commented that such criteria were already established. Specifically, NHTSA named its Volume 102 Highway Safety Plan document issued in 1978, its Problem Identification Manual for Traffic Safety Programs issued in 1976, and its Data Analysis and Reporting Techniques (DART) system. NHTSA

added, however, that it is now reviewing its problem identification criteria to determine what further refinements are needed.

We recognize that NHTSA is trying to implement sound program management which includes emphasizing the importance of problem identification and data analysis techniques. Also, we are aware of the documents described above by NHTSA but, in view of the lack of understanding that currently exists in the safety agencies' attempts to follow these documents, we believe NHTSA needs to clarify its problem identification and data analysis requirements. NHTSA says that its problem identification process is now undergoing review to determine further refinements needed. This review, according to NHTSA, will suggest additional statistical tests that can be used in the analysis of data and ensure that national research into highway safety problems is considered in the State problem analysis process. We believe NHTSA's ongoing review is the logical place to develop and test the criteria we recommended.

CHAPTER 3

THE SAFETY GRANT PROGRAM EFFECTIVENESS HAS YET TO BE DETERMINED

While there is no shortage of groups identifying highway safety problems, there is a shortage of proven solutions. In its recent assessment of the safety grant program, NHTSA said that providing scientific proof that a countermeasure has prevented accidents is costly, time consuming, risky, and subject to error. With few exceptions, Federal and State highway safety officials have been unable to determine which of the hundreds of projects funded under the safety grant program have had any positive or lasting effect on accident reduction.

Because DOT has not yet established a plan for determining and selecting the most effective countermeasures, many States tend to implement the same type of countermeasure to solve many different highway safety problems. Selective enforcement, for example, is being used as a countermeasure for alcohol problems, speed problems, motorcycle problems, hazardous location problems, and others. Although some safety agency officials believe selective enforcement is more likely to have an impact than other countermeasures, they feel that the impact is only temporary because accidents increase when the enforcement is discontinued.

In addition to selective enforcement countermeasures, many States continue to fund a broad range of other countermeasure projects or activities without knowing whether they are effective. Although the total number of projects has not been tabulated, for fiscal year 1979 NHTSA identified more than 1,700 projects costing at least $20,000 each. We noted many of these projects during our review of the safety agency files. Safety projects included (but were by no means limited to)

--purchasing cameras to ensure better evidence in traffic accident investigation,

--purchasing schoolbuses specifically for driver training,

--training driver education teachers to improve the quality of instruction and to reduce overinvolvement of young drivers in crashes,

--purchasing sound projectors and auxiliary equipment,

--defraying personnel and administrative expenses of the Alcohol Division within the Department of Health,

--purchasing simulators to enhance beginning driver skills before licensing,

--paying salaries and purchasing supplies to operate a bicycle court,

--printing and distributing updated driver handbooks,

--funding adult crossing guards to help prevent accidental traffic-related injuries at schools and other locations,

--providing seminars on handling hazardous materials,

--purchasing citizen band radio units and base stations for police in various communities,

--funding police participation in various traffic training courses,

--establishing traffic units in communities by hiring and training police officers and purchasing vehicles and equipment,

--hiring consultants to develop a survey to determine transportation problems of the elderly,

--contracting for motorcycle riding courses and a motorcycle safety program,

--providing emergency rescue training to upgrade community crash response capabilities,

--establishing a bicycle enforcement program to reduce bicycle accidents and thefts,

--helping develop a safety film library,

--developing a driver curriculum for the handicapped,

--promoting motorcycle helmet use through public service announcements,

--training personnel in truck and trailer inspections,

--developing a driver license testing improvement program,

--conducting medical advisory board seminars on restrictive driver licenses,

--providing improved driver education to juvenile alcohol offenders,

--developing and implementing a computerized accident records system,

--constructing remote base stations for public safety communications,

--purchasing anti-shock trousers for ambulance service,

--installing warning lights on ambulances,

--purchasing and operating pavement-marking equipment,

--purchasing aircraft for aerial speed enforcement,

--purchasing video tape equipment for a drinking driver program,

--providing traffic signs, posts, and fittings to local governments,

--identifying bicycle accident locations and developing measures to reduce such accidents,

--developing a court reporting network to help process drinking driver cases,

--purchasing alcohol breathalyzer equipment,

--acquiring 4-wheel drive patrol vehicles for snowbelt areas,

--purchasing ambulances and emergency medical service communications equipment,

--training emergency medical technicians and paramedics, and

--purchasing or leasing unmarked police cars.

We found that some completed projects had been evaluated for effectiveness, but few evaluations were able to relate project success to a definite reduction in motor vehicle accidents. Generally, DOT and the safety agencies did not know which projects reduced traffic accidents and related deaths, injuries, and property damage because:

--NHTSA regional offices and States generally lack the capability to conduct detailed impact evaluations.

--DOT has not implemented a planned and coordinated approach to evaluate countermeasures.

--Federal highway safety research efforts have provided little usable information to States and local governments for selecting the "best" projects.

--Individual projects reportedly are not large enough, nor are they continued long enough, to measure effectiveness.

LACK OF CAPABILITY TO CONDUCT NECESSARY EVALUATIONS

NHTSA and FHWA have taken different approaches to evaluating countermeasure effectiveness. FHWA, for the most part, does not require safety agencies to evaluate FHWA projects funded solely under the safety grant program, because they are generally only a small part of larger projects, which often include highway construction. For example, FHWA may approve a traffic engineering study that would identify hazards at a high accident location, which would subsequently lead to a highway construction project funded under another program. Any worthwhile effectiveness evaluation would include both programs. Thus, FHWA believes it is not practical to evaluate only the safety grant portion.

NHTSA's approach, as described by its guidelines issued in September 1978, requires safety agencies to independently evaluate projects funded under the safety grant program. Although safety agencies have the primary responsibility for carrying out evaluations, NHTSA guidelines indicate that NHTSA regional offices will provide safety agencies with needed guidance and technical assistance and that NHTSA headquarters will provide state-of-the-art guidance to both its regions and safety agencies. Many NHTSA and State officials, however, believe that NHTSA does not have adequate capabilities to perform these tasks. Thus, safety agencies are finding it necessary to contract for evaluation assistance, which at times has limited value.

NHTSA's former Director of State Program Assistance told us that NHTSA's ability to provide evaluation assistance to the States has been limited in the past. In its comments to our draft report, however, NHTSA said that in February 1980 it had established a new office-level evaluation unit that would advise State and NHTSA regional

office evaluation and program specialists. In addition, NHTSA commented that it is attempting to help States develop evaluation capabilities by providing basic and advanced evaluation courses. Thus, by spending more time and money in the evaluation area, NHTSA believes that in the future it will be better able to tell States what safety projects are successful or unsuccessful.

In our discussions with NHTSA regional office personnel, we found that their evaluation capabilities varied significantly, but for the most part they were limited. For example,

--In the Linthicum, Maryland, region, the data analyst has been designated the "expert evaluator," but he has had little professional training in the area other than on-the-job training. Most of his knowledge of evaluation techniques has come from studying the NHTSA evaluation manual.

--In the Lakewood, Colorado, region, the regional administrator told us that his data analyst should assist safety agencies in making evaluations, but she would first need NHTSA headquarters help to learn what is expected of the region. At the time of our review, we noted in Lakewood that a program planning and evaluator specialist position had not been filled.

--In the Chicago Heights, Illinois, region, an official stated that no employee had been designated as a program evaluator. Further, this official believed that the NHTSA headquarters staff should be "beefed up" to provide such services.

--In the Fort Worth, Texas, region, evaluation capabilities appeared to be more visible. The regional administrator said that he had two employees working as planner/evaluators. These employees plan to complete two evaluations on State projects during 1980 and will assist the safety agencies, as necessary, in completing 10 additional evaluations.

NHTSA's comments to our draft report indicate that the evaluation capabilities of six regional offices have been increased by adding an evaluation specialist at the master's or doctorate level and that in time the other regional offices' evaluation capabilities will also increase.

At the State level, seven of the nine States we visited lacked the capability to perform their own detailed evaluations. For example,

--In Ohio, the safety agency did not have any evaluation staff and had contracted for one evaluation that was inconclusive.

--In Maryland, with few exceptions, neither the safety agency staff nor project level personnel were able to perform detailed evaluations as NHTSA has outlined. Although each project included an evaluation requirement, many State agencies and most local government agencies could not conduct scientific evaluations due largely to lack of staff and evaluation expertise.

--In Pennsylvania, the safety agency did not have any qualified staff available to do evaluations because they have been assigned other safety program duties. If four to six evaluators are hired in the near future, as planned under a recent reorganization of the safety agency, an official said that this problem should be alleviated.

In contrast, the Illinois safety agency has an evaluation unit, and its highway safety projects have built-in evaluation schemes. Projects are evaluated to determine their contribution toward reducing accidents. As a result, the safety agency discontinued funding certain alcohol countermeasures because evaluation showed that they were not effective. Furthermore, this safety agency was doing evaluations before NHTSA emphasized them.

NO PLANNED AND COORDINATED APPROACH TO EVALUATING COUNTERMEASURES HAS BEEN IMPLEMENTED

At least six of the States we visited were evaluating or planned to evaluate similar safety projects because NHTSA has not implemented a planned and coordinated approach to evaluating countermeasures. In addition, NHTSA has yet to effectively disseminate existing evaluation information among all States, although it has on occasion distributed evaluation results within a specific NHTSA regional area.

Even in those cases we reviewed where safety activities had been evaluated, many evaluation results were inconclusive because they lacked the needed statistical data to make comparisons. In Texas, for example, a selective traffic enforcement project could not be measured for effectiveness because necessary preproject statistics were unavailable for comparison.

NHTSA requires that safety agencies identify in their safety plans at least one group of projects or activities they plan to evaluate each year. New Mexico, Texas, Illinois,

South Dakota, Maryland, and Pennsylvania have evaluated or plan to evaluate selective enforcement activities. NHTSA, in its safety program assessment report, stated that it has developed a number of important countermeasures, including new selective enforcement techniques, to aid in enforcing the speed limit. These new techniques need to be brought to the attention of the safety agencies, which are still trying on their own, with NHTSA's encouragement, to identify and evaluate those qualities that make up a successful selective enforcement project.

Safety agency officials in Illinois, Ohio, South Dakota, and Colorado told us that they seldom received other States' countermeasure evaluation results. While some evaluation reports are distributed either by NHTSA regional offices or by State agencies within regions, we found that generally safety agencies do not receive the results of evaluations done outside their regions. Yet, nearly all of the safety agency officials we questioned agreed that an exchange of evaluation information among all States would be extremely useful in selecting future countermeasures. Maryland's highway safety representative said that his State would benefit greatly from such information and would be pleased to provide information on its own evaluations to a coordinating office for distribution in any form.

As part of NHTSA headquarters-planned evaluation capabilities, officials hope to develop a list of safety projects to evaluate or monitor. These projects are to be visited by evaluation staff from NHTSA headquarters to determine how an evaluation strategy should be developed and how evaluation results should be disseminated among all States. Such plans, unfortunately, have not yet been formalized in writing, and NHTSA's former Director of State Program Assistance expressed concern that limited travel funds could delay the planned visits.

HIGHWAY SAFETY RESEARCH EFFORTS HAVE PROVIDED LITTLE USABLE INFORMATION

The House Committee on Public Works and Transportation, as well as some NHTSA and safety agency officials, are concerned about the lack of information coming from safety research efforts.

NHTSA regional officials from the four regions visited, as well as safety agency officials from New Mexico, Illinois, Ohio, Utah, and Pennsylvania, expressed dissatisfaction with NHTSA's research efforts. Safety agency officials said that they had not benefited from the research program, that research had failed to show what countermeasures were effective

in reducing accidents, or that they had received little feedback on research efforts. A Pennsylvania safety agency official explained, for example, that his knowledge of the Alcohol Safety Action Projects--an $88 million NHTSA research effort--came about only through discussions with the individual project managers (contractors), not from any NHTSA effort. In addition, Maryland's highway safety representative said that safety agencies should be involved in NHTSA's research planning and development because a number of research projects had been conducted in his State without the safety agency's knowledge.

The need for disseminating various NHTSA research results was identified as early as October 1975, when the Illinois Director of Transportation Safety wrote the following to a NHTSA Associate Administrator:

> "The outstanding successes in suppressing traffic accidents should be identified, and publicized together with the rationale for calling them a success. Concurrently, there should be a comprehensive review to identify failures in methods, programs and approaches to suppress traffic accidents, to the extent that such can be discovered. There is a widespread - in fact, worldwide - tendency in traffic safety to reinvent the wheel. This is not always a total loss. But attempts at a square wheel should be halted. Research and demonstration are becoming, simultaneously, more important to traffic safety and more expensive. Thus, knowing what doesn't work is more valuable than it ever was."

Today, this expressed need to publicize safety research efforts is still an issue. The House Subcommittee on Oversight and Review, Committee on Public Works and Transportation, recently requested that GAO determine how NHTSA and FHWA research efforts were being used. In our response 1/ we concluded that much of the research results is not being used, or cannot be used, because NHTSA has not always promoted research findings and has not developed a formal process to determine to what extent results are used.

Our report recommended that the NHTSA Administrator disseminate all research results, successful or unsuccessful.

1/"Highway Safety Research and Development-Better Management Can Make It More Useful," CED-80-87, dated July 28, 1980.

In April 1980, the Administrator responded that NHTSA is constantly trying to improve how research results are disseminated. She also stated that NHTSA had developed an interim system for disseminating research results that is currently being implemented throughout the program offices.

INDIVIDUAL PROJECTS MAY NOT BE LARGE ENOUGH OR CONTINUED LONG ENOUGH TO MEASURE EFFECTIVENESS

Safety agency officials in Texas, Utah, and Pennsylvania told us that individual projects were not large enough or continued long enough to measure their effectiveness. Similarly, NHTSA's assessment report of the safety grant program stated that most projects, while designed to influence larger State efforts, may be too small in themselves to determine if injuries and deaths were prevented by reducing the number of crashes.

Yet, safety agencies are generally trying to evaluate the safety program's effectiveness on a project-by-project basis, despite continued recognition from all levels that it is difficult, if not impossible, for this method to show any effect. A Pennsylvania safety agency official stated that, by itself, the grant funding level is so small that no effectiveness will ever be measured. In Texas, the safety agency staff indicated that it was unrealistic to expect long-term results from short-term funding. The staff also stated that greater leadtime was needed before accident trends could be expected to turn downward.

Several safety agency officials from New Mexico, Maryland, Ohio, Pennsylvania, and Colorado suggested alternatives to project-by-project evaluations. These included:

--Grouping together similar projects in all States and forming conclusions from the whole.

--Evaluating the results of statewide safety efforts.

--Evaluating the results of several projects or programs (regardless of funding source).

--Emphasizing administrative performance rather than trying scientifically to measure accident results.

--Applying expert judgment in lieu of scientific evaluations.

CONCLUSIONS

After 13 years of experience in highway safety, NHTSA and the safety agencies still do not have the necessary capability to conduct many evaluations under the safety grant program, nor does NHTSA effectively disseminate existing evaluation information among all States. In addition, Federal research efforts have, for the most part, been useless in helping State and local governments select successful highway safety projects. Thus, safety agencies continue to implement a wide range of projects without knowing which have been successful or unsuccessful in reducing accidents. Until NHTSA takes the lead and develops a credible and organized evaluation program to determine which countermeasures work or do not work and establishes a method for disseminating and using that information, the safety program's effectiveness will likely remain unknown. NHTSA plans to devote more resources to this area, but we were told that its plans may be hampered by funding limitations.

RECOMMENDATIONS TO THE SECRETARY OF TRANSPORTATION

We recommend that the Secretary of Transportation:

--Develop a plan that outlines what safety evaluations will be performed to determine the effectiveness of funded activities and establish a method for coordinating those evaluations among State safety agencies to avoid duplicating efforts.

--Establish a method for disseminating successful as well as unsuccessful project evaluation results among all State safety agencies and require that these results be considered before funding future safety projects.

STATE COMMENTS AND OUR EVALUATION

Maryland's Secretary of Transportation/Governor's representative for highway safety agreed that improved evaluation capabilities are needed in both Federal and State agencies. However, he was uncertain whether NHTSA was the most appropriate agency to take the lead in developing and establishing an evaluation program. In any instance, he believed that the State safety agencies, FHWA, and possibly others should be allowed to participate fully in defining such a program.

In addition, Maryland's Secretary of Transportation/ Governor's representative for highway safety stated that

care should be taken in any use of project evaluation results to promote similar projects among all States. He said that particular types of countermeasures that are highly successful or unsuccessful in one State may have opposite consequences in another State.

We agree that an evaluation plan that includes input from other Federal and State safety agencies would be the most effective, and we assume that the Secretary of Transportation will seek such input. We also agree that care should be taken in any use of project evaluation results to promote similar projects among all States. However, if similar projects in a number of States are grouped together for evaluation, the results--successful or unsuccessful--should certainly be considered in the future funding of similar projects in any State.

Utah's commissioner of public safety agreed that program effectiveness has never really been determined and that evaluating many countermeasures has not demonstrated conclusive results that can be attributed totally to the program.

Colorado's director of highway safety agreed that disseminating evaluation reports, with both positive and/or negative findings, was an area that had not been handled effectively. He felt that the States' suggested alternatives to project-by-project evaluations, as presented in the report, would produce a much better analysis of how the program is doing and what kinds of successes the program is enjoying. Also, the director believed that successful safety programs were being implemented in certain States and that NHTSA and FHWA should identify those programs and transfer that technology to all other States.

Texas' engineer-director of the State Department of Highways and Public Transportation believed that the safety grant program needed much stronger support from the Federal level in defining and communicating which types of programs are successful in preventing traffic accidents. This statement further supports our recommendations to the Secretary of Transportation.

AGENCY COMMENTS AND OUR EVALUATION

In responding to our conclusions, NHTSA stated that we had correctly identified the difficulties that it and the States face in developing evaluation procedures. NHTSA also stated that, although evaluations were bound to be costly, they were ultimately less costly than continued

investment of $2 billion a year in programs that no one can be certain will work.

Regarding our recommendations, NHTSA believes that its current program thrust already addresses the underlying issues we raised. NHTSA stated that it

> "* * * already has in existence a well developed base for implementing a full scale system for identifying State evaluation projects, the rate of progress, and final determination of effectiveness. An automated project identification system, called the National Project Reporting System (NPRS), has the ability to identify all projects identified as 'impact' type and to list whether or not they are to be evaluated. It will be possible in the future to develop a subfile in the NPRS which would identify projects to be evaluated, and, on a semi-annual basis, prepare a report indicating success or failure of each project. The data would then be communicated to all States for development of a 'do or don't do list.'"

If NHTSA carries out its evaluation efforts as planned, we believe our recommendations could be adequately addressed in those plans. However, the plans NHTSA describes have not yet been formalized, and much depends on the availability of additional resources. Since the program has been in operation for 13 years without an adequate system for knowing what safety projects work, we strongly believe that the Secretary of Transportation should implement our recommendations.

CHAPTER 4

OTHER MATTERS THAT AFFECT THE HIGHWAY SAFETY GRANT PROGRAM OBJECTIVE

In addition to problems in the Federal administration of the safety grant program already discussed, other problems exist that have an impact on the program's objective to reduce accidents, fatalities, and injuries. Many measures that could significantly contribute to highway safety have not been implemented or have been implemented incompletely, inefficiently, or only temporarily. For example:

--State legislators have regressed from implementing certain standards or have not encouraged measures that studies have shown to be effective.

--Traffic courts have let offenders off with insignificant or no penalties.

--Some safety agencies have not used all the safety grant funds available to them.

--Safety organizations outside the safety grant program oppose regulations that would increase the safety agencies' authority to coordinate all State safety activities.

--DOT has not determined whether State and local governments are continuing safety projects when safety grant funds stop.

--State and local agencies may not have provided an adequate share of financial support for individual projects.

STATE LEGISLATORS HAVE REGRESSED FROM IMPLEMENTING CERTAIN STANDARDS AND FROM ENCOURAGING THE MOST EFFECTIVE PROGRAMS

As previously mentioned, DOT has not required States to comply with its uniform safety standards since 1976. In that year, the 1966 act was amended to make it clear that the Secretary had broad discretionary authority and was not compelled to require States to address every element of every uniform standard in their safety programs.

Since the amendment, many State legislators have regressed from implementing certain elements of the uniform standards that studies have deemed important, such as

motorcycle helmet-use laws and periodic motor vehicle inspections. Helmet-use laws have been repealed or weakened in 27 States because most motorcyclists oppose these laws even though mounting evidence from NHTSA and State studies shows that using helmets saves lives. As a direct result of repealing these laws, motorcycle fatalities from 1976 to 1979 rose 46 percent. NHTSA reports that in addition to calling on the States to reenact their mandatory helmet-use laws, it is urging States to spend their grant funds to support voluntary usage programs, which it realizes are not very promising.

Motor vehicle inspections of tires and brakes have long been considered by DOT to have a major impact on reducing property damage accidents. Yet in recent years, at least seven States either have repealed their inspection laws or have decided to discontinue their pilot programs, even though studies in two of those States showed that vehicle inspections reduce vehicle defects.

In 1976 the Secretary of Transportation reported to the Congress that two countermeasures--mandatory seatbelt use and compliance with the 55-mile-per-hour speed limit--would prevent more deaths and injuries than all the rest of the countermeasures put together. Moreover, implementing these two countermeasures would cost less than 2 percent of all the others.

According to NHTSA's Administrator, seatbelts are the best life-saving and injury-preventing devices currently available to the motoring public. Yet, in 1979 a DOT survey showed that only 10.9 percent of drivers were using seatbelts, a 22-percent decline from the 14-percent usage reported in a 1978 study.

The Highway Safety Act authorized a total of $94.5 million in fiscal years 1974-76 for those States that adopted seatbelt legislation. No State adopted such a measure. Only Puerto Rico (authorized to participate in the safety grant program as a State) passed a seatbelt-use law, and it received $298,000 in safety funds. Unfortunately, enforcement of the Puerto Rico law has not been strong enough to significantly increase seatbelt use. In contrast, however, when Canada's province of British Columbia passed a mandatory seatbelt-use law and coupled it with strict enforcement, seatbelt use increased from 25 percent to 75 percent. In Ontario, a mandatory seatbelt-use law became effective in 1976, and fatalities dropped from 1,314 in 1975 to 1,001 in 1977.

Regarding the 55-mile-per-hour speed limit established by law in 1974 (Public Law 93-239), FHWA's 1979 data shows that the number of vehicles exceeding the speed limit was down 5 percent from the previous year's figure. Even so, 69 percent of the vehicles on rural interstate highways were still exceeding the limit. Several States with low 55-mile-per-hour compliance have minimal penalties for offenders. For example, New Mexico, which has one of the highest fatality rates in the country, neither imposes penalty points against drivers (whereby they lose their license for a period of time when they acquire a set number of points for traffic violations) nor fines drivers more than $15, unless they exceed 70 miles per hour in a 55-mile-per-hour zone. Pennsylvania has a law that in effect provides that violators caught by radar will not be convicted unless they are exceeding 60 miles per hour.

Some State legislators have objected to using 55-mile-per-hour compliance funds to hire additional police because long-term Federal funding cannot be guaranteed, and the States are reluctant to hire additional people whom they might have to lay off within 2 or 3 years when Federal funds cease. Therefore, safety agencies in States such as South Dakota and New Mexico have used or intend to use grant funds to pay time-and-a-half pay to police officers already on the payroll.

TRAFFIC COURTS LET OFFENDERS OFF TOO EASILY

Safety agency officials in South Dakota, New Mexico, Texas, and Illinois told us that traffic courts do not support the traffic safety system, and even when offenders are caught, courts sometimes do not penalize them significantly. For example, the Illinois safety agency director stated that even though his State had a 55-mile-per-hour speed limit, some judges did not convict offenders unless they were going more than 65 miles per hour. In Ohio, the director of highway safety said that the courts have a tendency to reduce convictions from drunk driving to reckless operation to avoid the mandatory 3-day jail sentence. The Colorado safety agency deputy director predicts that the courts will be less likely to convict drunk drivers in his State if a proposed mandatory jail sentence law for drunk driving is passed.

Judges and prosecutors, on the other hand, state that much of the blame lies with the jurors who often tend to sympathize with the alleged offender, making it difficult to obtain a conviction. Our 1979 report entitled "The Drinking-Driver Problem--What Can Be Done About It?" (CED-79-33, Feb. 21, 1979) also identified the lack of judicial support

as one of the major obstacles to combating the drinking-driver problem.

SAFETY AGENCIES HAVE NOT USED ALL AVAILABLE GRANT FUNDS

Some safety agencies have been less successful than others in spending their safety grant funds. The legislation allows the safety agencies 3 years after the year of appropriation to spend grant funds. Although States have not exceeded that limit, some States' unspent balances are excessive and reflect program management difficulties.

DOT allows safety agencies to obligate funds based on their approved safety plans rather than on the projects they have actually started. Funds for planned projects that are not started may simply be added to subsequent safety plans. Consequently, next year's plan may represent not only what the safety agency would like to do with new funds, but also what it plans to do with the previous year's remaining funds.

At the end of fiscal year 1979, safety agencies collectively had not claimed more than $232 million of available safety grant funds. The unclaimed balance represents about 120 percent of the fiscal year 1979 funds available, which means that some States had not claimed some of the funds made available before fiscal year 1979. Of the States we visited, Ohio, Maryland, and Pennsylvania had not claimed amounts that were considerably higher than the overall percentage. However, the Maryland representative for highway safety stated that some 95 percent of his State's fiscal year 1979 grant funds had been obligated to ongoing projects and were therefore in the process of being spent. The following table compares the nine States we visited, together with the total for all States and jurisdictions participating in the safety grant program.

Comparison of Unclaimed Funds (note a)

State	FY 79 obligation limitation	Unclaimed funds on September 30, 1979	Percent of unclaimed funds to FY 79 obligation limitation
Ohio	$ 8,701,298	$ 15,367,996	177
Maryland	3,022,654	4,126,235	136
Pennsylvania	9,571,457	12,619,119	132
Texas	10,902,665	10,529,437	97
Illinois	9,271,027	8,497,070	92
Utah	1,286,893	1,171,831	91
South Dakota	1,359,518	1,188,000	87
New Mexico	1,323,683	1,153,963	87
Colorado	2,514,331	2,160,148	86
All participants	194,463,000	232,597,673	120

a/NHTSA refers to "Unclaimed Funds" as "Unliquidated Obligations."

Some safety agencies purposely do not spend all their current year's apportionment of funds to assure continuity of projects if congressional appropriation delays occur or to reserve for possible project overruns and inflationary price increases. The Colorado safety agency director stated that all of Colorado's safety grant funds have been spent by the State and local agencies, but they in turn have not yet billed the safety agency for reimbursement. On the other hand, the Pennsylvania and Ohio safety agencies were having difficulty getting some of their other State agencies to implement projects. For example:

--The Pennsylvania Department of Education in 1979 was allotted about $400,000 in safety grant funds from the safety agency to implement driver training programs and other projects. The Department was only able to implement projects totaling about $200,000. As a result, about one-half of the grant funds were being carried forward to the next year.

--The Ohio safety plan for fiscal year 1978 projected that the Department of Health would buy 60 ambulances and carry out other tasks. The Department was only able to buy 11 ambulances and, subsequently, the safety agency "deobligated" $2.3 million from that project. During fiscal year 1979, the Department again did not meet its goal of 50 ambulances by buying only 21.

SAFETY ORGANIZATIONS OUTSIDE THE PROGRAM OPPOSE SAFETY AGENCY COORDINATION OF ALL SAFETY ACTIVITIES

In 1978 the House Committee on Public Works and Transportation observed that each State needed a highway safety agency that would be responsible for all State highway safety activities. House Report 95-1485 (Aug. 11, 1978) and the subsequent amendment to the 1966 act make it clear that the State highway safety agency is to be the central authority to bring together and coordinate the development of all the States' highway safety programs, regardless of the funding source. In spite of this congressional direction, the States' safety agencies are still without significant responsibility beyond the safety grant program. DOT has currently proposed a rule that, if implemented, will prohibit safety agencies from managing the safety activities of other State and local agencies that are funded by other sources. Under this rule, the safety agency will only be authorized to

--keep informed of other agencies' highway safety programs,

--assist other agencies financially and technically in developing and carrying out programs, and

--review and comment to the Governor on the effectiveness of highway safety activities throughout the State, regardless of funding source.

DOT's initial proposed rule was much stronger; however, it caused numerous protests from traditionally independent State agencies, such as highway departments and State Police, because it would have given the safety agency the authority to coordinate their safety programs. Many State officials expressed doubts about the capability of their existing safety agencies to undertake such a role, and State officials did not support the increase in staff they felt would be necessary to effectively carry out that role. Several State officials predicted that requiring the safety agency to review other State agencies' safety programs before they were

implemented would be impossible because it would take too long and because many programs were already underway.

If DOT's most recently proposed rule is put into effect, the responsibilities of the safety agencies operating the safety grant program will likely remain unchanged, with little or no additional influence to coordinate safety activities. In New Mexico, Texas, and Pennsylvania, safety agencies are now three or four levels removed from the Governor, who ensures that the State carries out this program. This situation indicates that safety agencies could have difficulty keeping informed of safety activities being implemented at higher State levels.

In nearly all of the safety agencies we visited, we identified the lack of "position power" as a problem. The Texas traffic safety section staff said the State safety agency

--does not have authority to control and coordinate the planning, implementation, and evaluation of programs or projects that use traffic safety funds;

--lacks the legal authority to require State and local agencies to make needed changes for correcting identified problems; and

--cannot prevent participating agencies from discontinuing projects without its approval.

The Texas staff also said that it could rely only upon its powers of persuasion to encourage participation in the program.

STATE AND LOCAL GOVERNMENTS MAY NOT BE CONTINUING SAFETY PROJECTS AFTER SAFETY GRANT FUNDS STOP

NHTSA's policy is to have State and local governments eventually take over the funding of safety projects. Therefore, the safety grant program would operate under a "seed money" concept. Exceptions permitted under NHTSA's policy, however, could allow safety projects to be federally funded indefinitely, and many safety efforts may not continue after Federal grant funds are discontinued. A NHTSA associate administrator said that NHTSA did not have sufficient resources to determine the extent to which State and local governments take over the funding of projects.

Following are examples of projects that safety agencies have been allowed to continue with safety grant funds for long periods:

--The Colorado State Department of Education has been funded for more than 10 years to support personnel to ensure that driver education programs remain in the schools and to provide school districts with technical assistance in other areas.

--The Illinois State Department of Public Health has been funded for 8 years to train emergency medical technicians.

--The Ohio Department of Health has been funded for 9 years to conduct regional conferences on alcohol and drug countermeasures.

--The New Mexico Department of Health and Social Services has been funded 6 years to do breath testing in support of the State's drinking-driver law.

The following comments from safety agency officials in Illinois, Pennsylvania, Texas, and Maryland cast doubt on whether safety efforts are continued when Federal grant funds stop:

--The program is no longer funded under the seed money concept; when Federal funding stops, so do the projects.

--The majority of selective traffic enforcement programs stop when Federal funding stops.

--Many enforcement projects pay for overtime; once Federal funds stop, so does the overtime.

Safety agency officials in South Dakota, Utah, and New Mexico, however, gave opposing comments or data:

--Federally initiated traffic enforcement projects seem to be continuing with State or local funds.

--Some communities have started funding their traffic enforcement projects sooner than required because their programs have been successful.

--Of 46 projects that will continue from 1979 to 1980, 24 will use State or local funds.

Regardless of whether safety agency officials thought projects continued after the safety grant funds stopped, no safety agency had any systematic procedures that required it to document that projects were actually being continued.

PROGRAM COSTS MAY NOT BE ADEQUATELY SHARED

The safety grant program is publicized as being carried out by cost sharing, but there are few requirements that it operate in that manner. Although State and local governments are spending billions of dollars on highway safety activities outside the safety grant program, they are required to spend only token amounts for operating this program. Further, some States require local governments to share in project costs while other States do not.

The safety grant program is different from most Federal-aid highway programs because States are required to contribute only a small share to operate it. Most Federal-aid highway programs require that States contribute 25 percent of their own funds toward individual projects. Under the safety grant program, States may meet their 25-percent share with safety expenditures unrelated to the grant projects, except for planning and administrative costs, which must be shared with 25 percent direct State expenditures. For fiscal year 1979, we estimated that of the $167 million in Federal funds obligated by NHTSA, the States were required to obligate $5.7 million of their funds to meet the planning and administrative cost-sharing requirement.

Some States are reluctant or unable to directly fund the planning and administrative costs of the safety grant program.

--South Dakota was granted special exemption from sharing costs of planning and administration because its safety agency did not ask the legislature to appropriate necessary funds to meet the requirement.

--Maryland transferred two key safety agency positions to other State agencies, causing a personnel shortage in the safety agency. According to the safety agency's director, his office no longer has an edge over other State agencies now that States must share in the planning and administration costs of the safety grant program. However, the Maryland representative for highway safety said that steps are being taken to reestablish one technical evaluation position within the safety agency.

--New Mexico was unwilling to request the additional people needed to administer the program because it would have required the State to share costs.

Texas, on the other hand, appropriates more than $2 million annually to help pay program costs, including its planning and administrative staff.

The unevenness with which cost-sharing requirements are applied to local governments further clouds the extent to which the program's costs are shared. Several safety agency officials told us that they required local governments to share the cost of their safety projects because they believe it improves or illustrates commitment. Yet these requirements varied among States, and even within States, as follows:

--New Mexico, Colorado, Utah, Ohio, and South Dakota have variable cost-sharing requirements, depending on the local community or type of program funded.

--Maryland does not require any cost sharing except on emergency medical equipment because of its low-proportional use for highway safety purposes.

--Pennsylvania requires 70/30 percent cost sharing, except for emergency medical equipment, which requires 50/50 cost sharing.

--Illinois has a 25-percent cost-sharing requirement.

--Texas does not have a cost-sharing requirement.

CONCLUSIONS

Every participating entity has, in some way, been unable to fully implement highway safety measures. The reasons vary: DOT no longer prevents States from regressing from standards implementation, some State legislators have not supported the most effective countermeasures, some traffic courts have let offenders off lightly, some safety agencies have been ineffective in implementing projects and do not have the authority to coordinate safety activities, and some State agencies and local governments may not be continuing projects after Federal funds are stopped or may not be willing or able to contribute significant resources to the projects.

While these problems are not prevalent in every State, they seem to be widespread enough to warrant substantial program changes to the present program structure. Such

changes, however, must be made by the Congress. We have therefore provided three alternatives in the following chapter for the Congress to consider. We believe that significant improvements in highway safety as a result of the presently structured safety grant program can never be effectively measured and/or really achieved.

STATE COMMENTS AND OUR EVALUATION

Utah's commissioner of public safety commented that there is validity in the finding that some State legislatures are regressing from the standards. He believes, however, that the trend to move away from the standards confines itself to the philosophy of "State rights" and has little to do with the effectiveness of highway safety programs. We disagree. As our report shows, this attitude is just one of many that is affecting the program's ability to reduce motor vehicle accidents. Unless steps are taken to improve these attitudes, projects or countermeasures that have the best chance to succeed may never be implemented.

Also, Utah's commissioner of public safety commented that traffic courts were most cooperative in imposing penalties in areas where there was good law enforcement, judicial training, and information dissemination.

In addition, the commissioner said that he was not opposed to centralizing the safety agency's role in each State, but he felt that the placement, makeup, and assigned responsibilities of the safety agency should be determined by the Governor and the State legislative body, not by the Federal Government.

AGENCY COMMENTS AND OUR EVALUATION

NHTSA commented that the shortcomings cited in this chapter do exist in various degrees and that they are certainly acknowledged. NHTSA agreed that the safety grant program could be improved, particularly through strengthening the authority and functions of the State highway safety agencies and by using analytical techniques for program development and evaluation. Under this approach, NHTSA feels that the program is still relatively new and must be given a chance to grow.

However, NHTSA criticized us for not recognizing the many positive benefits of the program, which NHTSA believes can be found throughout its January 1980 report to the House Appropriations Committee. In response, we should point out that the purpose of this chapter is to discuss problems outside the purview of the Federal administration of the

safety grant program that have an impact on the program's objective to reduce traffic accidents. In this respect, we identified six problems to discuss. To also include the positive benefits of the program, which NHTSA reported in its assessment report were difficult to statistically verify, would not have altered the fact that the six problems still exist and need to be recognized as a deterrent to the safety grant program's success.

CHAPTER 5

HIGHWAY SAFETY GRANT PROGRAM ALTERNATIVES FOR CONSIDERATION BY THE CONGRESS

After 13 years and $1.3 billion in Federal assistance, 50,000 people continue to die each year in motor vehicle accidents. The safety grant program was initiated in 1966 to reduce these accidents and related deaths, injuries, and property damage. But, as it is presently administered, the program lacks clear direction, funds hundreds of projects that have not been evaluated or cannot be evaluated to determine their effectiveness, and is not fully supported. Therefore, the Congress should consider some rather drastic administrative alternatives.

If the Federal role is to continue administering the safety grant program, the Congress could decide to increase DOT's administrative authority and improve its leadership role to make it more effective. If the Federal role is to assist in financing safety activities in State-identified problem areas, the Congress could decide that little further need exists for DOT's involvement other than to provide technical assistance to the States regarding safety research information. Therefore, the States could be funded more directly. If, however, the responsibility for financing and administering future highway safety activities is ever to be turned over completely to State and local governments, the Congress could decide that the 2-to 3-percent Federal contribution in the highway safety area is so small that continuing the safety grant program is not necessary, especially at a time when balancing the Federal budget is such an important issue.

Deciding on an alternative will not be easy; however, if the safety grant program remains unchanged, it will continue to address a multitude of safety activities without a clear, specific direction or goal. Measuring the success of this program as it is presently administered is, at best, difficult.

ALTERNATIVE NUMBER ONE: INCREASE FEDERAL LEADERSHIP AND ADMINISTRATIVE AUTHORITY

Should the Congress decide to retain the safety grant program under DOT's administration, the program's effectiveness can be improved by strengthening DOT's leadership role and administrative authority. This alternative, however, would limit the State safety agencies' ability to spend Federal funds for practically any safety-related project. As

this report points out, the safety grant program now lacks clear direction, proven effectiveness evaluations, and full support.

Without clear direction, the program has simultaneously addressed legislatively mandated safety areas, DOT-identified standards and requirements, and State-identified problems. At times, responding to one direction has resulted in States not responding to another direction that may have had a better chance for achieving the highway safety objective--a reduction in motor vehicle accidents, deaths, injuries, and property damage.

Without proven effectiveness evaluations, the program has funded hundreds of safety countermeasure activities with limited knowledge of what has had the most positive or lasting effect on accident reduction.

Without full support from all levels, many significant countermeasures have not been implemented. As previously mentioned, many States have regressed from the Federal uniform standards, such as mandatory motorcycle helmet-use laws, or are hesitant to encourage recognized life-saving countermeasures, such as seatbelt-use laws or strict 55-mile-per-hour speed enforcement.

If Federal administration of the safety grant program is to improve, DOT needs stronger authority. Coupled with this authority, we believe that all governments--Federal, State, and local--should be required to share, to some degree, in individual project costs. Although some State and local governments may be unwilling to share costs, the safety grant program should have a better chance of being effective if it is fully supported.

The Congress would need to amend the Highway Safety Act of 1966 to

--establish a single program direction for the State safety agencies to follow that would specifically spell out what and how safety objectives and goals are to be accomplished,

--prevent State safety agencies from digressing from that established program direction, and

--require State and local governments to share costs on a project-by-project basis to ensure their commitment to the program.

ALTERNATIVE NUMBER TWO: FUND THE PROGRAM MORE DIRECTLY

Should the Congress decide to retain the safety grant program in a more efficient manner, it could be funded directly through the State highway safety agencies. Establishing a directly funded grant program would eliminate many of the burdensome administrative requirements that are now part of the safety grant program. At the same time, however, Federal oversight of the spending of funds would be weakened. Detailed NHTSA and FHWA assistance would not be needed, but general program criteria to guide the spending of funds could be provided in the legislation.

DOT's involvement in the safety grant program cannot, under present constraints, provide the most effective program. as exhibited by the following:

--Problem identification based on data analysis and the development of annual highway safety plans are detailed administrative requirements that often do not result in States addressing their most significant highway safety problems.

--States and DOT generally do not know what countermeasure activities are the most effective. Therefore, selecting countermeasures is often based on judgment.

--Safety project evaluations are often inconclusive, or their results are not disseminated so they can be used effectively.

Under a directly funded program, the Congress could determine what safety activities would qualify for funding. For example, the Congress could appropriate funds for specific areas only, such as 55-mile-per-hour speed enforcement, seatbelt use, and/or alcohol countermeasure programs. Or, the Congress could identify a broad program range such as DOT's 18 uniform standards or 6 uniform requirements. At any rate, the directly funded approach would increase total spending in the eligible areas (if funding continues at current levels) because it would eliminate most of the 5 percent authorized for Federal administrative costs, and it would allow the States to set their own priorities within the established range.

We believe, as in alternative number one, that even a more directly funded program should also require that all governments share, to some degree, individual project costs.

The Congress would need to amend the Highway Safety Act of 1966 to reduce Federal administration of the safety grant program established under section 402. In place of Federal administration, direct funding would be provided to States' safety agencies to address safety activities defined by the Congress. State and local governments would be required to share costs on a project-by-project basis. Federal involvement, on the other hand, would be limited to providing technical assistance through safety research programs and auditing funded projects as required.

ALTERNATIVE NUMBER THREE: DISCONTINUE THE PROGRAM

The Congress could decide to discontinue the program. Since 1975-76, when the lowest fatality and fatality rate reductions were achieved, annual losses have climbed despite a dramatic increase in Federal funding. In the last 2 years, fatalities have exceeded the level reached before the safety grant program began.

Furthermore, the program has undergone numerous challenges, which indicates a lack of total support for highway safety from the States and the motoring public. In 1976, DOT was given the discretionary authority to no longer require States to address every element of every uniform safety standard. As a result, many States regressed from the standards, most notably by repealing or weakening their motorcycle helmet-use laws or failing to implement or continue periodic motor vehicle inspection programs. Moreover, the majority of the public refuses to accept measures that studies have shown to be effective, such as using seatbelts or complying with the 55-mile-per-hour speed limit.

In place of any strong authority to administer a national safety program, DOT has attempted to require States to identify their safety problems, select appropriate countermeasures, and evaluate results. Yet, even this attempt is hampered by legislative and DOT restraints that mandate grant funds to specific problem areas that may often differ from those problem areas identified by the States.

Meanwhile, safety grant funds continue to grow, with little or no assurance that more money is the answer. The 2- or 3-percent funding that this program represents does not seem to be large enough to have any significant, measurable impact on overall accident reductions. Moreover, the program may have already served its purpose by establishing safety standards, data collection/analysis systems, and State safety agencies. Those safety activities that the

State and local governments believe in and are already supporting with their own funds will likely continue as they were before this safety grant program.

Under this alternative, the Congress would need to amend the Highway Safety Act of 1966 to eliminate the safety grant program funded under section 402.

AGENCY COMMENTS AND OUR EVALUATION

NHTSA disagreed with all our proposed administrative alternatives, commenting that none of the options we suggested offered any advantages over the existing program. NHTSA believed that the overall operation of the safety grant program was effective and that on the whole it struck a reasonable balance between the need for program direction and the need for flexible management.

NHTSA also commented that our findings were not based on a complete understanding of the scope, history, and achievements of the program. NHTSA's specific comments on our Alternative Number One were:

> "We do not believe that it would be wise for Congress to increase Federal leadership and administrative authority (GAO alternative number one) at this time. The Secretary proposed a restructuring of the highway safety program to Congress in 1977, with which Congress only partially agreed and authorized. The rationale for maintaining our current program approach until we evaluate it is found in the Conference Committee Report on House Bill 11733 which was adopted in 1977. The Committee expressed concern that the Department's recommended changes in the highway safety program raised 'the spector of another wave of potentially disruptive administrative changes without clear evidence that these changes will materially affect the bottom line...' The Committee Report further stated: 'For this reason it is the considered judgement of the Committee that the existing highway safety standards should be retained at this time, but with very wide discretion given to the Secretary to carry out the intent of (the Department's) proposed shifts in emphasis within the present framework. This will permit a time for experimentation, a time for evaluation, and in due course, a time to come back to Congress with sound recommendations for change based on these antecedant efforts.'"

We have pointed out in our report that the program now lacks clear direction, proven effectiveness evaluations, and full support. If nothing is done to increase the Federal leadership and administrative authority, the States and localities will continue to address a multitude of safety activities without a clear, specific direction or goal. Measuring the success of this program under these present conditions is, at best, difficult.

NHTSA's specific comments on our Alternative Number Two were:

> "Change to a block grant program (GAO alternative number two) would continue to provide the States with some of the additional resources they need. But, without the uniform guidance, without the inducement to do comprehensive planning, without a mechanism to coordinate the array of activities which make up a comprehensive program, and without the manpower development and technical guidance support they need to do individual State problem identification, project evaluation, and subsequent program improvement, the prospects for continuing a viable uniform highway safety operation would be extremely remote."

As our report indicates, NHTSA is presently experiencing shortcomings in almost every one of the areas it mentioned as being essential to a viable uniform highway safety operation. NHTSA has yet to develop a workable mechanism for coordinating the array of safety activities, and NHTSA and the States still lack the capabilities to perform problem identification and project evaluations. If steps are not taken to improve this situation, only time will tell if continued Federal guidance is needed.

NHTSA's specific comments on our Alternative Number Three were:

"Discontinuation (GAO alternative number three) would simply return the nation to the earlier status."

Over the years, the States have continued to increase their funding of highway safety activities. NHTSA estimates that States and local governments are supporting about 98 percent of the safety funding in this area. Therefore, the 2 or 3 percent that the safety grant program provides may not be large enough to have a significant, measurable impact on reducing traffic accidents. Moreover, in some cases, the States have not used the grant funds

available, which could indicate a lack of commitment to the program. States and local governments will likely continue to support the safety activities they believe in, as they did before Federal assistance.

HIGHWAY SAFETY PROGRAM STANDARDS

Standard number		Administered by	Date issued
1	Periodic motor vehicle inspection	NHTSA	6-27-67
2	Motor vehicle registration	NHTSA	6-27-67
3	Motorcycle safety	NHTSA	6-27-67
4	Driver education	NHTSA	6-27-67
5	Driver licensing	NHTSA	6-27-67
6	Codes and laws	NHTSA	6-27-67
7	Traffic courts	NHTSA	6-27-67
8	Alcohol in relation to highway safety	NHTSA	6-27-67
9	Identification and surveillance of accident locations	FHWA	6-27-67
10	Traffic records	NHTSA	6-27-67
11	Emergency medical services	NHTSA	6-27-67
12	Highway design, construction and maintenance	FHWA	6-27-67
13	Traffic control devices (revised to Traffic engineering services, 11-19-71)	FHWA	6-27-67
14	Pedestrian safety	NHTSA-FHWA	11-02-68
15	Police traffic services	NHTSA	11-02-68
16	Debris hazard control and cleanup	NHTSA	11-02-68
17	Pupil transportation safety	NHTSA	5-02-72
18	Accident investigation and reporting	NHTSA	5-08-72

APPENDIX II

U.S. Department of Transportation
Office of the Secretary of Transportation

Assistant Secretary for Administration

400 Seventh Street, S.W.
Washington, D.C. 20590

July 11, 1980

Mr. Henry Eschwege
Director
Community and Economic
Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Eschwege:

We have enclosed two copies of the Department of Transportation's (DOT) reply to the General Accounting Office (GAO) draft report, "The Highway Safety Grant Program: Limited Success in Achieving Its Objective," dated June 3, 1980. The National Highway Traffic Safety Administration (NHTSA) has reviewed the GAO draft report and is in general disagreement with the findings and conclusions. NHTSA's position is discussed in detail in the enclosed statement.

Sincerely,

for Karen D. Lee
Edward W. Scott, Jr.

Enclosures

GAO note: See supplement to this report, CED-81-16A, for GAO's evaluation of NHTSA's detailed statement.

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